Montana Fish, Wildlife & Parks

March 1, 1999

1420 East 6th Ave.
P.O. Box 200701
Helena, MT 59620-0701

Environmental Quality Council
Montana Department of Environmental Quality
Montana Department of Fish, Wildlife and Parks
- Fisheries Division
- Endangered Species Coordinator
- Nongame Coordinator
- Great Falls Office

Montana State Library, Helena
MT Environmental Information Center
Montana Audubon Council
Fergus County Conservation District
U.S. Army Corp of Engineers, Helena
U.S. Fish and Wildlife Service, Helena
State Historic Preservation Office, Helena
N Land and Cattle Company, HC 63 Box 2055, Grassrange, MT 59032
Land & Water Consulting, Inc., P.O. Box 8254, Missoula, MT 59807

Ladies and Gentlemen:

Please find enclosed an Environmental Assessment prepared for a Future Fisheries Project tentatively planned to stabilize 3,500 feet of stream bank within a one mile reach of Flatwillow Creek. The proposed project is located approximately 12 miles south of the town of Grassrange in Fergus County.

Please submit any comments that you have by 5 P.M., April 1, 1999 to the Department of Fish, Wildlife and Parks in Helena at the address listed above. Completion of this project is contingent upon approval being granted by the Fish, Wildlife and Parks Commission. If you have any questions, feel free to contact me at (406) 444-2432.

Sincerely,

Mark Lere, Program Officer
Habitat Protection Bureau
Fisheries Division

ENVIRONMENTAL ASSESSMENT
Fisheries Division
Montana Fish, Wildlife and Parks
Flatwillow Creek Bank Stabilization and Fish Habitat Improvement Project

General Purpose: The 1995 Montana Legislature enacted statute 87-1-272 through 273 which directs the Department to administer a Future Fisheries Improvement Program. The program involves physical projects to restore degraded fish habitat in rivers and lakes for the purposes of improving wild fisheries. The legislature established an earmarked funding account to help accomplish this goal. This project is being proposed to stabilize approximately 3,500 feet of stream bank on Flatwillow Creek, involving a single property owner, located approximately 12 miles south of the town of Grassrange in Fergus County.

I. Location of Project: This project will be conducted on Flatwillow Creek located approximately 12 miles south of the town of Grassrange within Township 12 North, Range 23 East, Section 8 in Fergus County.

II. Need for the Project: Department Goal C indicates that a Fisheries Division objective is to "provide and support programs to conserve and enhance high quality habitat and protect native aquatic species." The Future Fisheries Improvement Program is a tool to help achieve that objective.

Due to a decades long effort by a previous landowner to remove willow from the riparian corridor, a four mile reach of Flatwillow Creek has become unstable. This instability is displayed by excessive stream bank erosion, channel down-cutting and poor fish habitat. The proposed project would restore approximately one mile of stream channel by laying back cut banks to a stable angle of repose and transplanting sod mats and mature willow clumps along the riparian corridor. The current landowner proposes to more intensively manage livestock grazing within the riparian corridor using cross fencing and off-stream water development to encourage re-establishment of woody vegetation.

III. Scope of the Project:

The proposal calls for stabilizing approximately 3,500 feet of eroding stream bank within a one mile reach of stream. The proposed work primarily would involve sloping eroding cut banks to a stable angle of repose and transplanting sod and mature willow clumps along the channel margin. A limited number of rootwads (about 20) would be installed to provide immediate fish habitat and to augment stabilization on channel meanders experiencing higher energy conditions. The goal of the project is to re-establish healthy willow and cottonwood communities within the riparian corridor. This project is expected to cost $51,225.00. Of this total, the Future Fisheries Improvement Program would be contributing up to $30,525.00.

IV. Environmental Impact Checklist:

Please see attached checklist.

V. Explanation of Impacts to the Physical Environment

1. Terrestrial and aquatic life and habitats.

Stabilizing the existing channel is expected to create a more diverse and healthy habitat for aquatic life by reducing sediment input and by creating hydrologic stable pool-riffle sequences. Expected improvements in the aquatic habitat should enhance resident trout populations in the stream. Habitat for riparian dependent wildlife would also be improved by re-establishing healthy willow and cottonwood communities using sod and shrub transplants along the stream corridor.

2. Water quantity, quality and distribution.

Short term increases in turbidity will occur during project construction. To minimize turbidity, construction will occur during a low flow period and operation of equipment in the stream channel will be minimized to the extent practicable. A permit for a short term exemption from turbidity will be obtained from the Water Quality Bureau and a 310 permit will be obtained from the local Conservation District. In the long term, stabilizing the existing channel would reduce the sediment contribution to downstream areas, thereby improving the overall quality of downstream waters.

3. Geology and soil quality, stability and moisture.

No effects on geology and soils are expected above the high water mark. Below the high water mark, the project is expected to create a more stable stream channel.

4. Vegetation cover, quantity and quality.

Riparian vegetation and cover would be greatly improved by creating a more stable stream channel and by trans-planting sod and shrubs along the stream corridor. Livestock grazing within the riparian corridor would be managed in a manner to encourage the re-establishment of a vigorous woody riparian community through the use of cross fencing and the development of off-stream watering sites.

5. Aesthetics.

Aesthetics would be enhanced by restoring an unstable reach of stream to a more healthy and natural stream environment. Approximately 3,500 feet of erodible banks would be stabilized through the use of sloping, re-vegetation and the installation of a limited number of rootwads. The riparian vegetative community would be enhanced through significant improvements in livestock grazing management and by transplanting sod and shrubs along the margins of the channel.

9. Historic and archaeological sites

The proposed project will likely require an individual Army Corp of Engineers (COE) 404 permit. Therefore, the State Historic Preservation Office has been contacted to determine the need for compliance with the federal historic preservation regulations. The project will not begin until a cultural clearance is granted.

VI. Explanation of Impacts on the Human Environment.

7. Access to & quality of recreational activities.

It is anticipated that the stabilization of one mile of Flatwillow Creek would improve overall aquatic habitat and, as a result, would enhance trout populations residing in the stream. Consequently, the recreational fishery in the stream would be expected to be improved. The present landowner allows public fishing access through the use and distribution of signed permission forms.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no action is taken, this segment of Flatwillow Creek will remain unstable. This ongoing instability will result in continued bank erosion, excessive sediment loading, channel down-cutting and the loss of fish habitat. In addition, habitat for riparian dependent wildlife will remain in a degraded condition. Recreational opportunities associated with fish and wildlife resources will remain reduced and aesthetics will continue to be impaired.

2. The Proposed Alternative

The proposed alternative is designed to stabilize erodible banks by intensively managing livestock grazing within the riparian corridor, sloping eroding cut banks to a stable angle of repose and transplanting sod and mature willow clumps along the channel margin. A limited number of rootwads (about 20) would be installed to provide immediate fish habitat and to augment stabilization techniques on channel meanders experiencing higher energy conditions. These activities would reduce sediment loading, resulting in a more diverse habitat for aquatic life. Improved grazing management, as well as sod/shrub transplants along the stream corridor, would create more diverse habitat for riparian dependent wildlife. This alternative would improve fish and wildlife habitat, aesthetics and water quality within the project area and would be expected to increase trout populations in the stream.

VIII. Environmental Assessment Conclusion Section

1. Is an EIS required? No.

We conclude from this review that the proposed activities will have a positive impact on the physical and human environment.

2. Level of public involvement.

The proposed project was reviewed and supported by the public review panel of the Future Fisheries Improvement Program. The proposed project also will be reviewed by the Fish, Wildlife and Parks Commission and will be contingent upon their approval. The Environmental Assessment (EA) is being distributed to all individuals and groups listed on the cover letter. The EA will be published on the Montana Electronic Bulletin Board.

3. Duration of comment period?

Public comment will be accepted through 5 P.M. on April 1, 1999.

4. Person responsible for preparing the EA.

Mark Lere, Program Officer
Habitat Protection Bureau
Fisheries Division
Montana Department of Fish, Wildlife and Parks
1420 East 6th Avenue
Helena, MT 59620

Telephone: (406) 444-2432

MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS
1420 E 6th Ave, PO BOX 200701, Helena, MT 59620-0701
(406) 444-2535

ENVIRONMENTAL ASSESSMENT

Project Title Flatwillow Creek Bank Stabilization and Fish Habitat Improvement Project

Division/Bureau Fisheries Division -Future Fisheries Improvement

Description of Project The project is being proposed to stabilize approximately 3,500 feet of stream bank within a one mile reach of Flatwillow Creek. The project site is located approximately 12 miles south of the town of Grassrange in Fergus County. The proposed project would restore approximately one mile of stream channel by sloping cut banks to a stable angle of repose and transplanting sod mats and mature willow clumps along the stream margin.

POTENTIAL IMPACT ON PHYSICAL ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Terrestrial & aquatic life and habitats		X				X
2. Water quality, quantity & distribution			X			X
3. Geology & soil quality, stability & moisture			X			X
4. Vegetation cover, quantity & quality		X				X
5. Aesthetics			X			X
6. Air quality				X		
7. Unique, endangered, fragile, or limited environmental resources				X		
8. Demands on environmental resources of land, water, air & energy				X		
9. Historical & archaeological sites				X		X

POTENTIAL IMPACTS ON THE HUMAN ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Social structures & mores				X		
2. Cultural uniqueness & diversity				X		
3. Local & state tax base & tax revenue				X		
4. Agricultural or industrial production				X		
5. Human health				X		
6. Quantity & distribution of community & personal income				X		
7. Access to & quality of recreational and wilderness activities			X			X
8. Quantity & distribution of employment				X		
9. Distribution & density of population & housing				X		
10. Demands for government services				X		
11. Industrial & commercial activity				X		
12. Demands for energy				X		
13. Locally adopted environmental plans & goals				X		
14. Transportation networks & traffic flows				X		

Other groups or agencies contacted or which may have overlapping jurisdiction Fergus County Conservation District, NRCS, US Fish and Wildlife Service, US Army Corp of Engineers

Individuals or groups contributing to this EA Land & Water Consulting, Inc.

Recommendation concerning preparation of EIS No EIS required.

EA prepared by : Mark Lere

Date: March 1, 1999